Industry Profiles

Manufacturing Industry

Data [illegible] and Evaluation

Alberta Human Resources and Employment

Overview:

The Manufacturing industry[1] in Alberta includes establishments involved in:

- Food Manufacturing
- Beverage and Tobacco Product Manufacturing
- Textile and Textile Product Mills and Clothing Manufacturing
- Petroleum and Coal Products Manufacturing
- Chemical, Plastics and Rubber Manufacturing
- Computer and Electronic Products Manufacturing
- Other Manufacturing

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[1] Based on Statistics Canada Labour Force Historical Survey data and projections for the North American Industry Classification System (NAICS) groups 311 and 339.

Section A: Business Environment

1. Employment and Unemployment Numbers and Rates:

All numbers are based on annual averages in 2005

- Employed Albertans = 1,784,400 people
- Albertans employed in Manufacturing = 130,900 people
- This industry employs about 7.3% of all employed Albertans
- Unemployed Albertans = 73,100 people
- Manufacturing unemployment = 3,300 people
- Alberta's unemployment rate = 3.9%
- Manufacturing unemployment rate = 2.9%

For more information on employment numbers or for a historical comparison, go to the Labour Force Survey or Statistics Canada websites.

2. Industry Growth:

- The Manufacturing industry is expected to grow on average 1.6% annually from 2005 to 2010.
- Employment is expected to increase to 142,588 by 2010.
- This industry will provide 5.8% of new jobs in Alberta between 2005 and 2010.

Adapted from the Alberta Modified COPS Outlook (2005-2010).

Industry Productivity

- Contributed $45.53 Real Gross Domestic Product (GDP) per hour worked in 2004 or $92,637 Real GDP per worker.
- In comparison, Alberta's Real GDP was $39.60 per hour worked or $73,549 Real GDP per worker.

For more information see the Labour Productivity in Alberta report online.

Outlook

Several factors, such as high energy prices, a strong Canadian dollar, and a tight labour market are all adding pressures to the Manufacturing industry. Technological advances have created the need for higher technical skills in this industry. Staff turnover is a challenge.

According to a BMO Financial Group report, growth of Alberta's Manufacturing industry is projected to be slightly higher than the average national rate, but slower than many of the province's other industries. The province's biggest Manufacturing industries – chemical products, food, machinery and fabricated metal products – are all expected to perform well. However, growth in several other sectors, including forest products, transportation equipment and primary metals, is expected to be lower and will restrain Manufacturing's overall performance.

High levels of construction, particularly in major oilsands developments will maintain demand for metal products and machinery. The province will likely continue to face a shortage of welders, machinists and pipefitters in the future.

Demand for value-added upgrading of Alberta's energy resources is increasing. As long as the world price for oil remains moderately high, manufacturing in Alberta's petroleum sector is likely to grow. Petrochemical production is currently one of the largest Manufacturing industries in Alberta. The main chemical growth will be in polyethylene and the production of linear alpha olefins (LAO), which will continue to be an important industry for Alberta. Until the largest ethylene production facility in the world opened in Joffre, Alberta, LAOs had to be imported from the United States.

The Food and Beverage Manufacturing industry in Alberta is largely dominated by pork and beef slaughterhouse and packing. Although the BSE crisis had a somewhat negative impact on beef packing in 2003, the industry has since recovered. Once the United States border opened to packaged and frozen cuts of beef in 2005, Alberta's two major beef processing plants worked overtime to deal with the excess supply of live cattle. Currently, several new meatpacking plants are expected in Alberta. A new South River Foods facility near Lacombe, will introduce a new process called "hot boning" to the Canadian meat packing industry.

Higher production costs, a strong Canadian dollar, wage inflation and worker shortages are all beginning to put pressures on Alberta's Wood Product Manufacturing industry. The Alberta Forest Products Association says there is a risk of mill shutdowns in the future. The softwood lumber dispute between Canada and the United States has yet to be resolved, and continues to challenge the industry. If these duties and tariffs are removed, an increase in lumber products imported by the United States is expected. Another growing challenge is the shortage of truck drivers to transport both logs and processed materials.

The Computer and Electronic and Electrical Products Manufacturing industry is mainly supported by domestic demand, so there is potential for export in the future. The Alberta-California Venture Channel will allow better access to markets in the United States. Computer manufacturing, although a small industry, will likely see growth due to an increase in sales in the United States and Asia.

3. Company Size

Establishment Size	Alberta Businesses		Manufacturing	
Less than 20 employees	505,700	35.0%	27,100	22.2%
20 to 99 employees	501,600	34.7%	39,000	31.9%
100 to 500 employees	278,200	19.2%	41,700	34.2%
Over 500 employees	161,200	11.1%	14,300	11.7%

Data Source: Labour Force Survey Historical Review 2005, Statistics Canada

Section B: Human Resources Profile

1. Occupational Information:

Some examples of occupations that can be found in the Manufacturing industry include:

- Meat Cutter
- Machinist
- Manufacturing Engineer
- Sawmill Machine Operator
- Instrument Technician

For a complete listing of all occupations related to this industry as well as detailed information on educational and skill requirements, visit the Alberta Occupational Profiles website.

2. Demographics: Age and Gender

Gender in the Manufacturing industry:

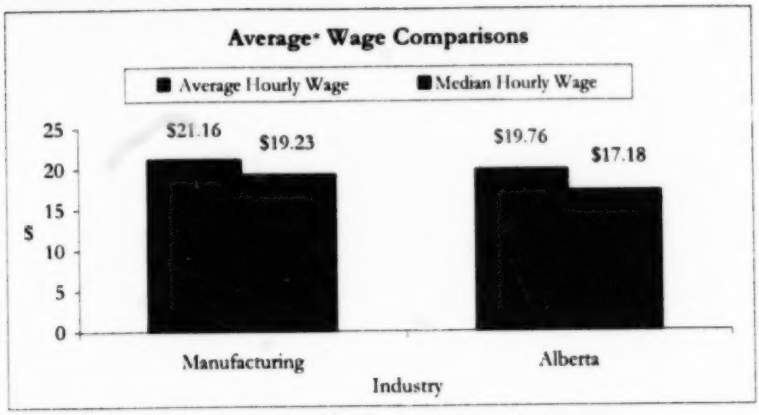
- Women employed: 33,300 people (25.4%)
- Men employed: 97,700 people (74.6%)

In comparison, women comprise 45% of the total employed in Alberta and men make up 55% of the employed.

Age Characteristics	Alberta Employees		Manufacturing	
	Number	%	Number	%
15- 24 years	311,800	17.5%	18,000	13.8%
25-54 years	1,236,400	69.3%	98,900	75.6%
55 years and over	236,200	13.2%	14,100	10.8%

Data Source: Labour Force Survey Historical Review 2005, Statistics Canada

3. Wages:



Data Source: Labour Force Historical Review 2005, Statistics Canada
*Average represents the arithmetic mean

Wage and Salary Information for Selected Occupations

Occupation	Average Hourly Wage			Overall Average Salary
	Starting	After 3 years	Top	
Industrial Engineering and Manufacturing Technologists and Technicians	$ 17.82	$ 23.41	$ 35.44	$ 69,476
Manufacturing Managers	$ 25.77	$ 27.06	$ 35.69	$ 66,778
Facility Operation and Maintenance Managers	N/A†	$ 23.28	$ 28.61	$ 52,583
Plastic Products Assemblers, Finishers and Inspectors	$ 9.44	$ 14.55	$ 17.05	$ 28,673
Industrial Butchers and Meat Cutters, Poultry Preparers and Related Workers	$ 10.13	$ 12.44	$ 15.98	$ 26,135
Sewing Machine Operators	$ 10.44	$ 10.15	$ 11.31	$ 21,984

Data Source: 2005 Wage and Salary Survey
*Average represents the arithmetic mean
†N/A due to insufficient response

For more information on wages, job descriptions, duties, required skills and educational requirements for specific occupations in the Manufacturing industry refer to the Wage and Salary Survey online.

Section C – Additional Information

1. Links to Selected Industry Associations:

Food and Beverage:

- Alberta Food Processors Association
- Brewers Association of Canada
- Food Processors of Canada
- Canadian Poultry and Egg Processors Council

Wood Product and Paper Manufacturing:

- Alberta Forest Products Association

Rubber, Plastic, and Chemical Manufacturing:

- Canadian Plastics Industry Association
- Canadian Chemical Producers Association
- Canadian Petroleum Products Institute

Metals Fabrication and Machinery

- Society of Manufacturing Engineers
- Canadian Machinery and Metal Working Magazine

Other Manufacturing:

- Canadian Manufacturers and Exporters

2. Link to Government Library Database:

http://acscinfolink.gov.ab.ca/libraries/workplace/